



The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Data Science

**From Image Super-Resolution to
Face Hallucination**

by

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Abstract

Single image super-resolution is a classical problem in computer vision. It aims at recovering a high-resolution image from a single low-resolution image. This problem is an underdetermined inverse problem, of which solution is not unique. In this seminar, I will share our efforts in solving the problem by deep convolutional networks in a data-driven manner. I will then discuss our work on hallucinating faces of unconstrained poses and with very low resolution. In particular, I will show how face hallucination and dense correspondence field estimation can be optimized in a unified deep network. Finally, I will present a new method for recovering natural and realistic texture in low-resolution images by prior-driven deep feature modulation.

Date: Tuesday, 24 April 2018

Time: 3:00p.m. – 4:20p.m.

Venue: LTD, HKUST

All are welcome!